## Report card
### Brazil

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Obesity prevalence

Adults, 2013-2014

Survey type: Measured
Age: 18+
Sample size: 59402
Area covered: National


Notes: NB. Combined adult data estimated. These estimates were calculated by weighting male and female survey results. Weighting based on World Bank Population % total female 2019 (https://data.worldbank.org/indicator/SP.POP.TOTL.FE.ZS - accessed 30.09.20)

Unless otherwise noted, overweight refers to a BMI between 25kg and 29.9kg/m², obesity refers to a BMI greater than 30kg/m².
Children, 2013-2014

Survey type: Measured
Age: 12-17
Sample size: 73399
Area covered: National
Notes: Z Score Cut Off (1 to <2) Overweight, >2 Obesity
Cutoffs: WHO
% Adults living with obesity in Brazil 1975-2014

Men

Survey type: Measured

References: For full details of references visit https://data.worldobesity.org/

Unless otherwise noted, overweight refers to a BMI between 25kg and 29.9kg/m², obesity refers to a BMI greater than 30kg/m².

Different methodologies may have been used to collect this data and so data from different surveys may not be strictly comparable. Please check with original data sources for methodologies used.
Women

Survey type: Measured

References: For full details of references visit https://data.worldobesity.org/

Unless otherwise noted, overweight refers to a BMI between 25kg and 29.9kg/m², obesity refers to a BMI greater than 30kg/m².

Different methodologies may have been used to collect this data and so data from different surveys may not be strictly comparable. Please check with original data sources for methodologies used.
% Adults living with overweight or obesity in Brazil 1975-2014

Men

Survey type: Measured
References: For full details of references visit https://data.worldobesity.org/

Unless otherwise noted, overweight refers to a BMI between 25kg and 29.9kg/m², obesity refers to a BMI greater than 30kg/m².

Different methodologies may have been used to collect this data and so data from different surveys may not be strictly comparable. Please check with original data sources for methodologies used.
Women

% overweight or obesity

Survey type: Measured
References: For full details of references visit https://data.worldobesity.org/

Unless otherwise noted, overweight refers to a BMI between 25kg and 29.9kg/m², obesity refers to a BMI greater than 30kg/m².

Different methodologies may have been used to collect this data and so data from different surveys may not be strictly comparable. Please check with original data sources for methodologies used.
% Adults living with obesity in selected countries in the Americas Region 1960-2018

Men

References: For full details of references visit https://data.worldobesity.org/

Different methodologies may have been used to collect this data and so data from different surveys may not be strictly comparable. Please check with original data sources for methodologies used.
Women

References:

For full details of references visit https://data.worldobesity.org/

Different methodologies may have been used to collect this data and so data from different surveys may not be strictly comparable. Please check with original data sources for methodologies used.
% Adults living with obesity in selected countries worldwide 1976-2018

Men

References:

For full details of references visit https://data.worldobesity.org/

Different methodologies may have been used to collect this data and so data from different surveys may not be strictly comparable. Please check with original data sources for methodologies used.
Women

References:

Different methodologies may have been used to collect this data and so data from different surveys may not be strictly comparable. Please check with original data sources for methodologies used.
Overweight/obesity by education

Adults, 2011

Survey type: Self-reported

Age: 18+

Sample size: Approx. 54,000

Area covered: National


Notes: Prevalence of overweight and obesity by educational level (years of study)

Unless otherwise noted, overweight refers to a BMI between 25kg and 29.9kg/m², obesity refers to a BMI greater than 30kg/m².
Boys, 2007

Survey type: Measured
Age: 7-14
Sample size: 2826
Area covered: Subnational - Municipality of Florianópolis


Notes: Prevalence of obesity based on Father's schooling years. For the analyses, the schoolchildren were classified into two groups: not overweight or obese (values equivalent to BMI < 25kg/m2 in adults) and overweight or obese (values equivalent to BMI ≥ 25kg/m2 in adults)

Cutoffs: IOTF
Girls, 2007

<table>
<thead>
<tr>
<th>Survey type:</th>
<th>Measured</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age:</td>
<td>7-14</td>
</tr>
<tr>
<td>Sample size:</td>
<td>2826</td>
</tr>
<tr>
<td>Area covered:</td>
<td>Subnational - Municipality of Florianópolis</td>
</tr>
<tr>
<td>Notes:</td>
<td>Prevalence of obesity based on Father's schooling years. For the analyses, the schoolchildren were classified into two groups: not overweight or obese (values equivalent to BMI &lt; 25kg/m² in adults) and overweight or obese (values equivalent to BMI ≥ 25kg/m² in adults)</td>
</tr>
<tr>
<td>Cutoffs:</td>
<td>IOTF</td>
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</tbody>
</table>

Survey type: 
Age: 
Sample size: 
Area covered: 
References:  
Notes: 
Cutoffs: 

Prevalence of obesity based on Father's schooling years. For the analyses, the schoolchildren were classified into two groups: not overweight or obese (values equivalent to BMI < 25kg/m² in adults) and overweight or obese (values equivalent to BMI ≥ 25kg/m² in adults)
# Overweight/obesity by age

## Adults, 2013

<table>
<thead>
<tr>
<th>Age</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-29</td>
<td>10</td>
<td>20</td>
</tr>
<tr>
<td>30-39</td>
<td>20</td>
<td>30</td>
</tr>
<tr>
<td>40-49</td>
<td>30</td>
<td>40</td>
</tr>
<tr>
<td>50-59</td>
<td>40</td>
<td>50</td>
</tr>
<tr>
<td>60-69</td>
<td>50</td>
<td>60</td>
</tr>
<tr>
<td>70+</td>
<td>60</td>
<td>70</td>
</tr>
</tbody>
</table>

Survey type: Measured  
Sample size: 59402  

Unless otherwise noted, overweight refers to a BMI between 25kg and 29.9kg/m², obesity refers to a BMI greater than 30kg/m².
Children, 2013-2014

Survey type: Measured
Sample size: 73399
Area covered: National
Definitions: WHO
Cutoffs: WHO
Overweight/obesity by region

Adults, 2012

Survey type: Self-reported
Age: 18+
Sample size: Approx 54000
Area covered: National

References:

Notes:
Prevalence of Obesity by Cities in each Region. The VIGITEL data analyzed in this study include weight and height reported by the respondents as well as their age, gender and level of schooling/education. In 2012, the VIGITEL performed the imputation of the missing data on weight and height.

Unless otherwise noted, overweight refers to a BMI between 25kg and 29.9kg/m², obesity refers to a BMI greater than 30kg/m².
Boys, 2004-2005

Survey type: Measured
Age: 10-15
Sample size: 36976
Area covered: National


Notes: International cut-off BMI values were used for the evaluation of nutritional status (Cole et al)

Cutoffs: IOTF
Girls, 2004-2005

Survey type: Measured
Age: 10-15
Sample size: 36976
Area covered: National


Notes: International cut-off BMI values were used for the evaluation of nutritional status (Cole et al)

Cutoffs: IOTF
Overweight/obesity by socio-economic group

Adults, 2008-2010

Survey type: Measured
Age: 20-59
Sample size: 527
Area covered: Regional - N. Eastern Brazil


Notes: WHO BMI classification of 1995 used for Adults. Median family income, R$1000.00, or $492.02.
Unless otherwise noted, overweight refers to a BMI between 25kg and 29.9kg/m², obesity refers to a BMI greater than 30kg/m².
Children, 2010

![Bar chart showing obesity and overweight percentages by economic level]

Survey type: Measured
Age: 6-10
Sample size: 939
Area covered: Municipality of Cruzeiro do Oeste, Southern Brazil.

References:

Notes:
The socioeconomic status was defined through a questionnaire of economic classification by the Brazilian Association of Research Companies – Associação Brasileira de Empresas de Pesquisa, ABEP. This classification is based on items such as ownership of goods (television, radio, car, vacuum cleaner, VCR and/or DVD player, fridge, freezer and washing machine), services (housemaid), household characteristics (number of bathrooms) and educational level of the head of the household.

The total score for each item results in the classification of respondents into seven strata identified as "social classes" A1, A2, B1, B2, C, D, and E(17). For analysis purposes, the eight economic levels, proposed by ABEP, were regrouped and named as follows: A1, A2, and B1 in High Economic Level (H); B2, C1 and C2 in Medium Economic Level (M) and, D and E in Low Economic Level (L).

Cutoffs:
- Other
Insufficient physical activity

Adults, 2016

References:
Men, 2016

Women, 2016

Children, 2010

Age: 11-17


Notes: % of school going adolescents not meeting WHO recommendations on Physical Activity for Health, i.e. doing less than 60 minutes of moderate- to vigorous-intensity physical activity daily.

Definitions: % Adolescents insufficiently active (age standardised estimate)
Boys, 2010

Age: 11-17


Notes: % of school going adolescents not meeting WHO recommendations on Physical Activity for Health, i.e. doing less than 60 minutes of moderate- to vigorous-intensity physical activity daily.

Definitions: % Adolescents insufficiently active (age standardised estimate)
Girls, 2010

% insufficient physical activity

Age: 11-17


Notes: % of school going adolescents not meeting WHO recommendations on Physical Activity for Health, i.e. doing less than 60 minutes of moderate- to vigorous-intensity physical activity daily.

Definitions: % Adolescents insufficiently active (age standardised estimate)
Estimated per-capita fruit intake

Adults, 2017

Survey type: Measured
Age: 25+
References: Global Burden of Disease, the Institute for Health Metrics and Evaluation [http://ghdx.healthdata.org/]
Definitions: Estimated per-capita fruit intake (g/day)
Estimated per-capita processed meat intake

Adults, 2017

Survey type: Measured
Age: 25+
References: Global Burden of Disease, the Institute for Health Metrics and Evaluation [http://ghdx.healthdata.org/]
Definitions: Estimated per-capita processed meat intake (g per day)
Estimated per-capita whole grains intake

Adults, 2017

Survey type: Measured

Age: 25+

References: Global Burden of Disease, the Institute for Health Metrics and Evaluation [http://ghdx.healthdata.org/]

Definitions: Estimated per-capita whole grains intake (g/day)
Mental health - depression disorders

Adults, 2015


Definitions: % of population with depression disorders
Mental health - anxiety disorders

Adults, 2015

References:

Definitions:
% of population with anxiety disorders
Oesophageal cancer

Men, 2018


Definitions: Estimated age-standardized incidence rates (World) in 2018, oesophagus, adults ages 20+. ASR (World) per 100,000
Women, 2018


Definitions: Estimated age-standardized incidence rates (World) in 2018, oesophagus, adults ages 20+. ASR (World) per 100,000
Breast cancer

Women, 2018

Reference:
Global Cancer Observatory, Cancer incidence rates [http://gco.iarc.fr/] (last accessed 30th June 2020)

Definitions:
Estimated age-standardized incidence rates (World) in 2018, breast, females, ages 20+. ASR (World) per 100,000
Colorectal cancer

Men, 2018

Age: 20+

References: Global Cancer Observatory, Cancer incidence rates [http://gco.iarc.fr/] (last accessed 30th June 2020)

Definitions: Estimated age-standardized incidence rates (World) in 2018, colorectum, adults, ages 20+. ASR (World) per 100,000
Women, 2018

Age: 20+


Definitions: Estimated age-standardized incidence rates (World) in 2018, colorectum, adults, ages 20+. ASR (World) per 100,000
Pancreatic cancer

Men, 2018

Age: 20+


Definitions: Estimated age-standardized incidence rates (World) in 2018, pancreas, adults, ages 20+. ASR (World) per 100,000
Women, 2018

Age: 20+


Definitions: Estimated age-standardized incidence rates (World) in 2018, pancreas, adults, ages 20+. ASR (World) per 100,000
Gallbladder cancer

Men, 2018

References:
Global Cancer Observatory, Cancer incidence rates [http://gco.iarc.fr/] (last accessed 30th June 2020)

Definitions:
Estimated age-standardized incidence rates (World) in 2018, gallbladder, adults, ages 20+. ASR (World) per 100,000
Women, 2018

Age: 20+


Definitions: Estimated age-standardized incidence rates (World) in 2018, gallbladder, adults, ages 20+. ASR (World) per 100,000
Kidney cancer

Men, 2018


Definitions: Estimated age-standardized incidence rates (World) in 2018, kidney, adults, ages 20+. ASR (World) per 100,000
Women, 2018

Age: 20+


Definitions: Estimated age-standardized incidence rates (World) in 2018, kidney, adults, ages 20+. ASR (World) per 100,000
Cancer of the uterus

Women, 2018

Age: 20+

References: Global Cancer Observatory, Cancer incidence rates [http://gco.iarc.fr/] (last accessed 30th June 2020)

Definitions: Estimated age-standardized incidence rates (World) in 2018, cervix uteri, females, ages 20+. ASR (World) per 100,000
Raised blood pressure

Adults, 2015

References:
Global Health Observatory data repository, World Health Organisation,
http://apps.who.int/gho/data/node.main.A875?lang=en

Definitions:
Age Standardised estimated % Raised blood pressure 2015 (SBP>=140 OR DBP>=90).
Men, 2015


Definitions: Age Standardised estimated % Raised blood pressure 2015 (SBP>=140 OR DBP>=90).
Women, 2015


Definitions: Age Standardised estimated % Raised blood pressure 2015 (SBP>=140 OR DBP>=90).
Raised cholesterol

Adults, 2008

% Raised cholesterol

References:

Definitions:
% Raised total cholesterol (>= 5.0 mmol/L) (age-standardized estimate).
Men, 2008

% raised total cholesterol (>= 5.0 mmol/L) (age-standardized estimate).

References:
Global Health Observatory data repository, World Health Organisation, [http://apps.who.int/gho/data/node.main.A885](http://apps.who.int/gho/data/node.main.A885)

Definitions:
% Raised total cholesterol (>= 5.0 mmol/L) (age-standardized estimate).

Definitions: % Raised total cholesterol (>= 5.0 mmol/L) (age-standardized estimate).
Raised fasting blood glucose

Men, 2014-2019


Definitions: Age Standardised % raised fasting blood glucose (>= 7.0 mmol/L or on medication).
Women, 2014-2019

References:
Global Health Observatory data repository, World Health Organisation,
http://apps.who.int/gho/data/node.main.A869?lang=en

Definitions:
Age Standardised % raised fasting blood glucose (>= 7.0 mmol/L or on medication).
Diabetes prevalence

Adults, 2017

References:

Definitions:
Diabetes age-adjusted comparative prevalence (%).
Health systems

Economic classification: Upper Middle Income

Health systems summary

Brazil has a universal, publicly funded healthcare system that is known as the Sistema Único de Saúde (SUS). SUS is funded by taxes and contributions from government (at a federal, state and municipal level). The private sector, however, currently serves approximately 25% of the population, as many individuals have the option to purchase insurance plans via their employer or choose to purchase individually (with many receiving tax relief on these payments).

It is widely reported that there is great disparity in treatment availability and quality between public and private healthcare, and so it seems that those that can afford private healthcare purchase it. As a result, out of pocket expenditure in Brazil is relatively high.

Indicators

<table>
<thead>
<tr>
<th>Question</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Where is the country’s government in the journey towards defining ‘Obesity as a disease’?</td>
<td>Some progress</td>
</tr>
<tr>
<td>Where is the country’s healthcare provider in the journey towards defining ‘Obesity as a disease’?</td>
<td>Some progress</td>
</tr>
<tr>
<td>Is there specialist training available dedicated to the training of health professionals to prevent, diagnose, treat and manage obesity?</td>
<td>No</td>
</tr>
<tr>
<td>Have any taxes or subsidies been put in place to protect/assist/inform the population around obesity?</td>
<td>No</td>
</tr>
<tr>
<td>Are there adequate numbers of trained health professionals in specialties relevant to obesity in urban areas?</td>
<td>Some progress</td>
</tr>
<tr>
<td>Are there adequate numbers of trained health professionals in specialties relevant to obesity in rural areas?</td>
<td>No</td>
</tr>
<tr>
<td>Are there any obesity-specific recommendations or guidelines published for adults?</td>
<td>Yes</td>
</tr>
<tr>
<td>Are there any obesity-specific recommendations or guidelines published for children?</td>
<td>Yes</td>
</tr>
<tr>
<td>In practice, how is obesity treatment largely funded?</td>
<td>Insurance</td>
</tr>
</tbody>
</table>
Perceived barriers to treatment

- Lack of political will, interest and action
- Influence of food industry
- Lack of training for HCPs and and lack of trained HCPs
- Poor health literacy and behaviour
- Poor availability of pharmaceutical treatments
- Obesity not recognised as a disease

Summary of stakeholder feedback

It appears that although obesity is considered a public health priority in Brazil, there is little government action. Obesity is commonly seen as a lifestyle issue and treatment options are limited.

In the public system it appears that only bariatric surgery is covered, meaning that comprehensive treatment and management is only available in the private sector. Private care, however, is unaffordable for most of the Brazilian population, so only the wealthiest can afford obesity-related treatments. Associação Brasileira para o Estudo da Obesidade are currently working towards the approval of obesity medications through the SUS healthcare scheme, which will hopefully make them more affordable. One stakeholder reported that obesity medication is difficult to get privately too, with private insurers rarely funding it.

While a national strategy on NCDs exists, stakeholders were unclear whether there is an accompanying implementation guide. There are also clinical guidelines for obesity treatment, but rate of uptake is reportedly low. In the public system is appears that patients need to have a BMI ≥ 35 kg/m² with comorbidities (or ≥ 40 kg/m² without) to qualify for bariatric treatment but even then, there is a long waiting list. Treatment is said to be particularly difficult to access in the rural areas.

Overall, there are inadequate numbers of trained health professionals in specialties relevant to obesity, with there being little to no specialist training available. It was noted that although there are increasing numbers of physicians, they do not have specific obesity training and so qualify ill-equipped to treat and manage obesity.

Based on interviews/survey returns from 5 stakeholders

Last updated: June 2020